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COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 14:46:26 ON 22 FEB 2005
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FILE COVERS 1907 - 22 Feb 2005 VOL 142 ISS 9
FILE LAST UPDATED: 21 Feb 2005 (20050221/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L1 HAS NO ANSWERS
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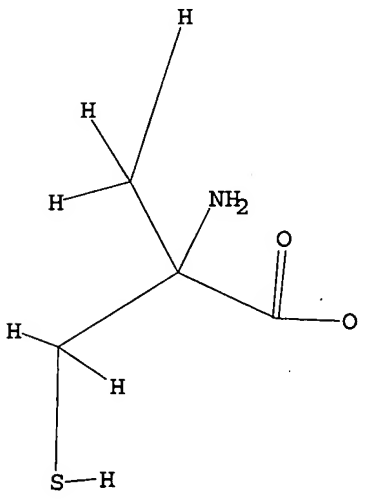

Structure attributes must be viewed using STN Express query preparation.

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Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 14:47:01 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 179 TO ITERATE

100.0% PROCESSED 179 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
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PROJECTED ANSWERS: 2 TO 124

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L4 5 L3 AND PY<2002

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L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:730698 CAPLUS
DOCUMENT NUMBER: 135:289056
TITLE: Preparation of amidino compounds useful as nitric oxide synthase inhibitors
INVENTOR(S): Webber, Ronald Keith; Awasthi, Alok K.; Bergmanis, Arija A.; Durley, Richard C.; Ganser, Scott S.; Hagen, Timothy J.; Hallinan, Ann E.; Hansen, Donald W.; Hickory, Brian S.; Moormann, Alan E.; Pitzele, Barnett S.; Promo, Michelle A.; Schartman, Richard R.; Snyder, Jeffrey S.; Trivedi, Mahima; Tsymbalov, Sofya
PATENT ASSIGNEE(S): Pharmacia Corporation, USA
SOURCE: PCT Int. Appl., 144 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072703	A1	20011004	WO 2001-US9433	20010323 <--
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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US 6403830	B2	20020611			
US 2002111493	A1	20020815	US 2001-816575		20010323
US 6586474	B2	20030701			
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PRIORITY APPLN. INFO.:			US 2000-191923P	P	20000324
			US 2001-816575	A3	20010323
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			US 2002-321969	B3	20021217

OTHER SOURCE(S): MARPAT 135:289056

AB The invention relates to S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-L-cysteine (1) or its pharmaceutically acceptable salts for use as nitric oxide synthase (NOS) inhibitors. Thus, 1.2HCl was prepared by a multistep procedure involving S-alkylation of (2R)-2-methyl-L-cysteine hydrochloride with Boc-NHCH2CH2Br (Boc = tert-butoxycarbonyl), deprotection, condensation with Et acetimidate hydrochloride, and acidolysis with 1 N HCl. (2R)-2-methyl-L-cysteine hydrochloride was obtained from (R)-cysteine Me ester hydrochloride. Inhibitory assays for compound 1.2HCl showed hiNOS, hecNOS, hncNOS, and human cartilage IC50 values 3.1, 77, 15 μM, and 0.7 μM, resp.

IT **148766-37-4P**

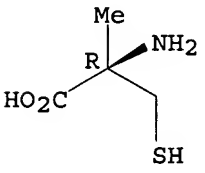
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidino compds. useful as nitric oxide synthase inhibitors)

RN 148766-37-4 CAPLUS

CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:730697 CAPLUS

DOCUMENT NUMBER: 135:273215

TITLE: Preparation of amidino compounds useful as nitric oxide synthase inhibitors

INVENTOR(S): Webber, Ronald Keith; Awasthi, Alok K.; Bergmanis, Arija A.; Durley, Richard C.; Fok, Kam F.; Ganser, Scott S.; Hagen, Timothy J.; Hallinan, Ann E.; Hansen, Donald W.; Hickory, Brian S.; Manning, Pamela T.; Mao, Michael; Moormann, Alan E.; Pitzele, Barnett S.; Promo, Michelle A.; Schartman, Richard R.; Scholten, Jeffrey A.; Snyder, Jeffrey S.; Toth, Mihaly V.;

Trivedi, Mahima; Tsymbalov, Sofya; Tjoeng, Foe Siong
PATENT ASSIGNEE(S): Pharmacia Corporation, USA
SOURCE: PCT Int. Appl., 159 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072702	A2	20011004	WO 2001-US9431	20010323 <--
WO 2001072702	A3	20020919		
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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US 6586474	B2	20030701		
EP 1265859	A2	20021218	EP 2001-920718	20010323
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ZA 2002006459	A	20030813	ZA 2002-6459	20010323
JP 2003528852	T2	20030930	JP 2001-570615	20010323
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US 2003199701	A1	20031023	US 2002-321969	20021217
US 2004186178	A1	20040923	US 2004-815375	20040401

PRIORITY APPLN. INFO.:

US 2000-191923P	P	20000324
US 2001-816575	A3	20010323
WO 2001-US9431	W	20010323
US 2002-321969	B3	20021217

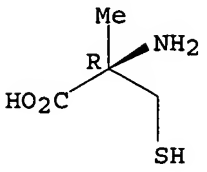
OTHER SOURCE(S): MARPAT 135:273215

AB Amidino compds. R11N:CR13NR12CR9R10CR1R7-X-CR5R6CR2(NR3R4)COR8 [X = S, SO, SO2; R1, R5, R6, R7 = H, halo, alkyl (alkyl and other groups may be substituted), alkenyl, alkynyl, alkoxyalkyl; R2 = alkyl, alkenyl, alkynyl, alkoxyalkyl, alkylthioalkyl; R3 = H, OH, CHO, alkanoyl, CO2H, C(O)SH or alkyl esters; R8 = OH, alkoxy, an amino or alkylamino group or R3 and R8 may form a ring; R4 = H, CO2H, carbalkoxy; R9, R10 = H, alkyl, alkenyl, alkynyl, alkoxyalkyl; R11, R12 = H, OH, CO2H, C(O)SH or esters or R11 and R12 may form a ring; R13 = alkyl (with provisos)] or their salts were prepared as nitric oxide synthase (NOS) inhibitors. Thus, S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-L-cysteine dihydrochloride (1) was prepared by a multistep procedure involving S-alkylation of (2R)-2-methyl-L-cysteine hydrochloride with Boc-NHCH2CH2Br (Boc = tert-butoxycarbonyl), deprotection, condensation with Et acetimidate hydrochloride, and acidolysis with 1 N HCl. (2R)-2-methyl-L-cysteine hydrochloride was obtained from (R)-cysteine Me ester hydrochloride. Inhibitory assays for compound 1 showed hiNOS, hecNOS, hncNOS, and human cartilage IC50 values 3.1, 77, 15 μM, and 0.7 μM, resp.

IT **148766-37-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of amidino compds. useful as nitric oxide synthase inhibitors)

RN 148766-37-4 CAPLUS
CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:657309 CAPLUS
DOCUMENT NUMBER: 123:83804
TITLE: Total synthesis of thiangazole, a novel naturally occurring HIV-1 inhibitor from Polyangium sp
AUTHOR(S): Boyce, Richard J.; Mulqueen, Gerard C.; Pattenden, Gerald
CORPORATE SOURCE: Dep. Chemistry, Nottingham Univ., Nottingham, NG7 2RD, UK
SOURCE: Tetrahedron (**1995**), 51(26), 7321-30
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Pergamon
DOCUMENT TYPE: Journal
LANGUAGE: English
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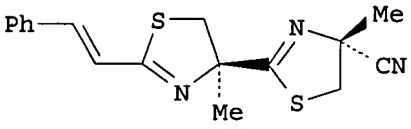

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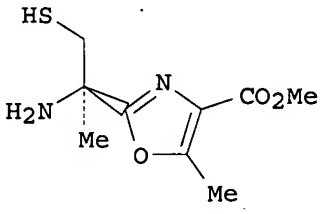


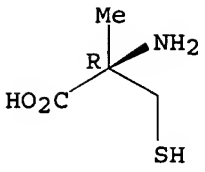
II

AB The total synthesis of the cinnamyl-oxazole substituted tris-thiazoline containing metabolite (-)-thiangazole is described. The synthesis is based on elaboration of the R-2-methylcysteine derived bis-thiazoline nitrile I and oxazole II intermediates, followed by a cyclocondensation reaction between I and II, and treatment of the resulting tris-thiazoline oxazole ester with methylamine.

IT **148766-37-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(total synthesis of thiangazole)

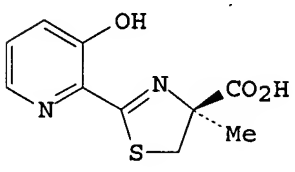
RN 148766-37-4 CAPLUS
CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:8366 CAPLUS
DOCUMENT NUMBER: 120:8366
TITLE: Synthesis of the thiazoline-based siderophore (S)-desferrithiocin
AUTHOR(S): Mulqueen, Gerard C.; Pattenden, Gerald; Whiting, Donald A.
CORPORATE SOURCE: Dep. Chem., Univ. Nottingham, Nottingham, NG7 2RD, UK
SOURCE: Tetrahedron (**1993**), 49(24), 5359-64
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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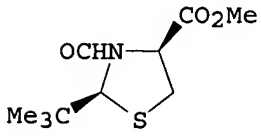


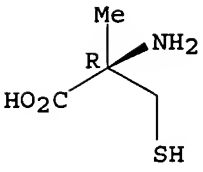
II

AB A total synthesis of (S)-desferrithiocin (I), isolated from Streptomyces antibioticus, is described. Thus, a concise synthesis of (S)-2-methylcysteine hydrochloride is first developed based on a modification of Seebach's self-reproduction of chirality protocol using the thiazolidine intermediate II derived from (S)-cysteine and pivalaldehyde as a key intermediate. When a solution of (S)-2-methylcysteine hydrochloride is heated with 2-cyano-3-hydroxypyridine in the presence of triethylamine, I is produced in 97% yield. In a similar manner, use of (R)-2-methylcysteine in a cyclocondensation with 2-cyano-3-hydroxypyridine led to (R)-desferrithiocin, in a similar yield.

IT **148766-37-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(intermediate in desferrithiocin total synthesis)

RN 148766-37-4 CAPLUS
CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:473043 CAPLUS
DOCUMENT NUMBER: 119:73043
TITLE: Enantioselective synthesis of 2-alkyl substituted cysteines
AUTHOR(S): Pattenden, Gerald; Thom, Stephen M.; Jones, Martin F.
CORPORATE SOURCE: Dep. Chem., Univ. Nottingham, Nottingham, NG7 2RD, UK
SOURCE: Tetrahedron (**1993**), 49(10), 2131-8
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 119:73043
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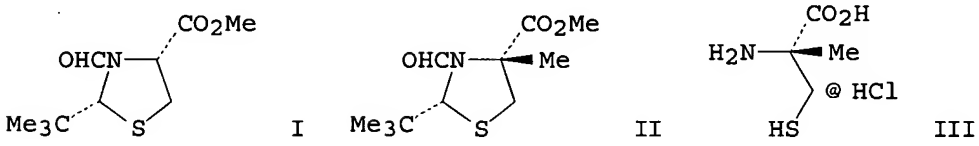
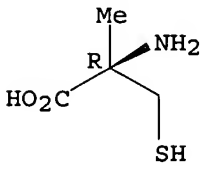


AB Treatment of (R)-cysteine-derived thiazolidine derivative I with LDA-DMPU at -90°, followed by alkylation with MeI gave methylated thiazolidine II containing the Me and tert-Bu groups virtually exclusively anti to one another. Hydrolysis of II by 5M HCl gave (R)-2-methylcysteine hydrochloride (III) in excellent yield and enantiomeric purity. A range of other 2-alkyl substituted cysteines of excellent optical purity are prepared by this modification of Seebach's "self-reproduction of chirality" protocol.

IT **148766-37-4P**
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(enantioselective synthesis of)

RN 148766-37-4 CAPLUS
CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

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L4            5 S L3 AND PY<2002

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Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.



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100.0% PROCESSED    3203 ITERATIONS                          20 ANSWERS
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L8   ANSWER 1 OF 6  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2001:730697  CAPLUS
DOCUMENT NUMBER:          135:273215
TITLE:                    Preparation of amidino compounds useful as nitric
                          oxide synthase inhibitors
INVENTOR(S):              Webber, Ronald Keith; Awasthi, Alok K.; Bergmanis,
                          Arija A.; Durley, Richard C.; Fok, Kam F.; Ganser,
                          Scott S.; Hagen, Timothy J.; Hallinan, Ann E.; Hansen,
                          Donald W.; Hickory, Brian S.; Manning, Pamela T.; Mao,
                          Michael; Moormann, Alan E.; Pitzele, Barnett S.;
                          Promo, Michelle A.; Schartman, Richard R.; Scholten,
                          Jeffrey A.; Snyder, Jeffrey S.; Toth, Mihaly V.;
                          Trivedi, Mahima; Tsymbalov, Sofya; Tjoeng, Foe Siong
PATENT ASSIGNEE(S):       Pharmacia Corporation, USA
SOURCE:                   PCT Int. Appl., 159 pp.
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CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072702	A2	20011004	WO 2001-US9431	20010323 <--
WO 2001072702	A3	20020919		
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EP 1265859	A2	20021218	EP 2001-920718	20010323
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PRIORITY APPLN. INFO.:

US 2000-191923P	P	20000324
US 2001-816575	A3	20010323
WO 2001-US9431	W	20010323
US 2002-321969	B3	20021217

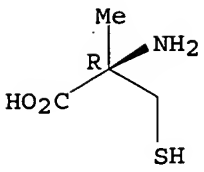
OTHER SOURCE(S): MARPAT 135:273215

AB Amidino compds. R11N:CR13NR12CR9R10CR1R7-X-CR5R6CR2(NR3R4)COR8 [X = S, SO, SO2; R1, R5, R6, R7 = H, halo, **alkyl** (**alkyl** and other groups may be substituted), alkenyl, alkynyl, alkoxyalkyl; R2 = **alkyl**, alkenyl, alkynyl, alkoxyalkyl, alkylthioalkyl; R3 = H, OH, CHO, alkanoyl, CO2H, C(O)SH or **alkyl** esters; R8 = OH, alkoxy, an amino or alkylamino group or R3 and R8 may form a ring; R4 = H, CO2H, carbalkoxy; R9, R10 = H, **alkyl**, alkenyl, alkynyl, alkoxyalkyl; R11, R12 = H, OH, CO2H, C(O)SH or esters or R11 and R12 may form a ring; R13 = **alkyl** (with provisos)] or their salts were prepared as nitric oxide synthase (NOS) inhibitors. Thus, S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-L-cysteine dihydrochloride (1) was prepared by a multistep procedure involving S-alkylation of (2R)-2-methyl-L-cysteine hydrochloride with Boc-NHCH2CH2Br (Boc = tert-butoxycarbonyl), deprotection, condensation with Et acetimidate hydrochloride, and acidolysis with 1 N HCl. (2R)-2-methyl-L-cysteine hydrochloride was obtained from (R)-cysteine Me ester hydrochloride. Inhibitory assays for compound 1 showed hiNOS, hecNOS, hncNOS, and human cartilage IC50 values 3.1, 77, 15 μM, and 0.7 μM, resp.

IT **148766-37-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of amidino compds. useful as nitric oxide synthase inhibitors)

RN 148766-37-4 CAPLUS
CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L8 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:163575 CAPLUS
DOCUMENT NUMBER: 128:204913
TITLE: Preparation of thiazepinecarboxamide derivatives and related heterocycles as metalloprotease inhibitors
INVENTOR(S): De, Biswanath; Natchus, Michael George; Pikul, Stanislaw; Almstead, Neil Gregory; Matthews, Randall Stryker; Taiwo, Yetunde Olabisi; Cheng, Menyan
PATENT ASSIGNEE(S): Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9808827	A1	19980305	WO 1997-US14551	19970822 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
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AU 731319	B2	20010329		
EP 925287	A1	19990630	EP 1997-939442	19970822 <--
EP 925287	B1	20030115		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
CN 1228773	A	19990915	CN 1997-197541	19970822 <--
CN 1232457	A	19991020	CN 1997-198547	19970822 <--
BR 9713185	A	19991103	BR 1997-13185	19970822 <--
JP 2000515166	T2	20001114	JP 1998-511711	19970822 <--
NZ 334252	A	20001124	NZ 1997-334252	19970822 <--
AT 231132	E	20030215	AT 1997-939442	19970822
US 6166005	A	20001226	US 1997-921953	19970826 <--
ZA 9707694	A	19980223	ZA 1997-7694	19970827 <--
ZA 9707695	A	19980223	ZA 1997-7695	19970827 <--
NO 9900839	A	19990428	NO 1999-839	19990222 <--
KR 2000035917	A	20000626	KR 1999-701653	19990227 <--
KR 2000035923	A	20000626	KR 1999-701659	19990227 <--
US 6545038	B1	20030408	US 2000-707212	20001106
US 2003186958	A1	20031002	US 2003-361115	20030206

PRIORITY APPLN. INFO.:

US 1996-24764P	P	19960828
WO 1997-US14551	W	19970822
US 1997-921953	A3	19970826

US 2000-707212 A3 20001106

OTHER SOURCE(S): MARPAT 128:204913
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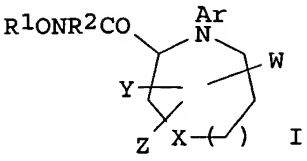
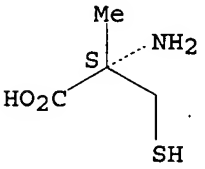


AB I [R1 = H; R2 = H, **alkyl**, acyl; Ar = COR3, SO2R4; R3 = alkoxy, **alkyl**, aryl, etc.; R4 = **alkyl**, heteroalkyl, aryl, heteroaryl; X = CH2, O, S, SO, SO2, NR5; R5 = H, **alkyl**, etc.; W = H, **alkyl**, alkylene or arylene or heteroarylene bridge between two carbons; Y = H, OH, amino, etc.; Z = -, H, spiro moiety, oxo; n = 1-3], inhibitors of metalloproteases (no data), were prepared. E.g., N-hydroxy-2,2-dimethyl-S,S-dioxo-4-[(4-methoxyphenyl)sulfonyl]thiazepine-3(S)-carboxamide was prepared using D-penicillamine and 4-methoxybenzenesulfonyl chloride as starting materials.

IT **151062-55-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thiazepinecarboxamide derivs. and related heterocycles as metalloprotease inhibitors)

RN 151062-55-4 CAPLUS
CN D-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

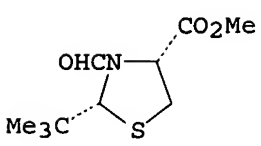
Absolute stereochemistry.



● HCl

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:473043 CAPLUS
DOCUMENT NUMBER: 119:73043
TITLE: Enantioselective synthesis of 2-**alkyl** substituted cysteines
AUTHOR(S): Pattenden, Gerald; Thom, Stephen M.; Jones, Martin F.
CORPORATE SOURCE: Dep. Chem., Univ. Nottingham, Nottingham, NG7 2RD, UK
SOURCE: Tetrahedron (**1993**), 49(10), 2131-8
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 119:73043
GI



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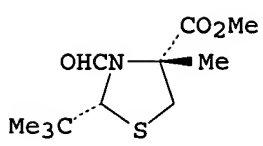
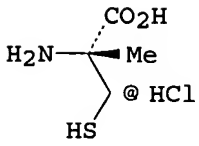


II



III

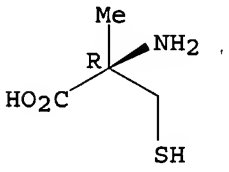
AB Treatment of (R)-cysteine-derived thiazolidine derivative I with LDA-DMPU at -90°, followed by alkylation with MeI gave methylated thiazolidine II containing the Me and tert-Bu groups virtually exclusively anti to one another. Hydrolysis of II by 5M HCl gave (R)-2-methylcysteine hydrochloride (III) in excellent yield and enantiomeric purity. A range of other 2-**alkyl** substituted cysteines of excellent optical purity are prepared by this modification of Seebach's "self-reproduction of chirality" protocol.

IT **148766-37-4P**
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(enantioselective synthesis of)

RN 148766-37-4 CAPLUS

CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



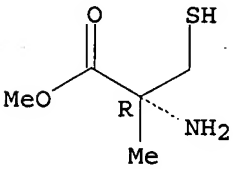
● HCl

IT **120519-93-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 120519-93-9 CAPLUS

CN L-Cysteine, 2-methyl-, methyl ester, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L8 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1989:231195 CAPLUS

DOCUMENT NUMBER: 110:231195

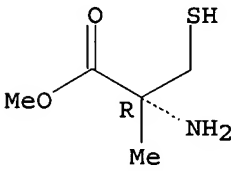
TITLE: Asymmetric catalysis. XL. Enantioselective hydrosilylation of ketones by diphenylsilane with 1,5-cyclooctadienerhodium chloride dimer-pyridinethiazolidine catalysts

AUTHOR(S): Brunner, Henri; Kuerzinger, Alfred
CORPORATE SOURCE: Inst. Anorg. Chem., Univ. Regensburg, Regensburg, D-8400, Fed. Rep. Ger.
SOURCE: Journal of Organometallic Chemistry (**1988**), 346(3), 413-24
CODEN: JORCAI; ISSN: 0022-328X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 110:231195

AB Fifty-eight prochiral ketones have been used in enantioselective hydrosilylation with Ph_2SiH_2 promoted by in-situ catalysts consisting of [Rh(COD)Cl]2 (COD = 1,5-cyclooctadiene) and the chiral ligands (4S)-2-methyl-2-(2-pyridyl)-4-carbomethoxy-1,3-thiazolidine (I) and (4S)-2-(2-pyridyl)-4-carbethoxy-1,3-thiazolidine (II). Hydrolysis of the silyl ethers gave the corresponding secondary alcs. Aryl Me ketones were reduced with enantiomeric excesses (ee's) better than 80% irresp. of whether the substituents Me, Cl, F, OMe were in o-, m-, or p- position of the Ph ring. The only exceptions were ketones containing the p-OMe substituent, for which a p-methoxy effect diminished the optical yields. Heterocyclic ketones were also hydrosilylated with high optical inductions, e.g. 2-acetylpyridine with 88.5% ee. Linear **alkyl** ketones with the CO group in the 2-position (Me ketones) gave up to 50% ee R, in contrast to the corresponding Et ketones with the CO group in 3-position, which gave predominantly S configurated products. In 35 cases the asym. inductions were higher with ligand II than with ligand I.

IT **120519-93-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with acetylpyridine)
RN 120519-93-9 CAPLUS
CN L-Cysteine, 2-methyl-, methyl ester, hydrochloride (9CI) (CA INDEX NAME)

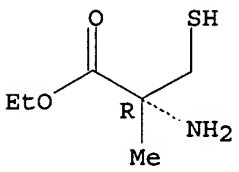
Absolute stereochemistry.



● HCl

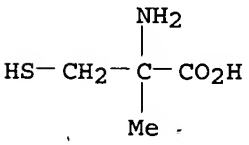
IT **120519-94-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with pyridinecarboxaldehyde)
RN 120519-94-0 CAPLUS
CN L-Cysteine, 2-methyl-, ethyl ester, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L8 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1987:435786 CAPLUS
DOCUMENT NUMBER: 107:35786
TITLE: Radioprotective and radiosensitizing effects of sulfur-containing amino acid derivatives on E. coli and mice
AUTHOR(S): Nishimura, Akihisa
CORPORATE SOURCE: Radiol. Technol. Course, Kurashiki Paramed. Coll., Kurashiki, 701-01, Japan
SOURCE: Okayama Igakkai Zasshi (**1986**), 98(9/10), 827-50
CODEN: OIZAAV; ISSN: 0030-1558
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Both protection and sensitization of Escherichia coli and C57BL mice against 60Co γ-rays with S-containing amino acid derivs. (S-**alkyl**-L-cysteines, S-**alkyl**-2-methyl-DL-cysteines and their hydration derivs. and sulfoxides of these compds.) were examined E. coli Cells (106/mL) in 20 mM aqueous solution of the S compds. was irradiated with 60 Gy of γ-rays. Mice (5-wk-old males) were subjected to 7.5 Gy of γ-rays after a single i.p. injection of 0.75 mmol/kg body weight of each compound In the case of E. coli, S-**alkyl** compds. were more effective than S-Pr ones for protection, and sulfoxide amino acids exhibited a radiosensitization effect. The replacement of the α-H of S-substituted cysteines by Me groups decreased the radioprotective effect. The hydantoin derivs. such as DL-5-allylthiomethylhydantoin were much more radioprotective than the original amino acids. In mice, DL-5-allylthio-methyl-5-methylhydantoin and DL-5-propylthiomethylhydantoin (0.75 mmole/kg) had a marked radioprotective effect. The survival ratios were 6.33 and 6.67, or the dose reduction factors (DRF) were 1.41 and 1.53, resp. On the other hand, DL-5-allylthiomethyl-5-methylhydantoin sulfoxide had a radiosensitizing effect, with a survival ratio of 0.333 and a DRF of 0.517.
IT **22681-73-8D**, S-**alkyl** derivs.
RL: BIOL (Biological study)
(gamma ray effect on Escherichia coli and mice modification by)
RN 22681-73-8 CAPLUS
CN Cysteine, 2-methyl- (8CI, 9CI) (CA INDEX NAME)



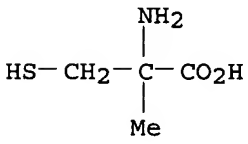
L8 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1956:91190 CAPLUS
DOCUMENT NUMBER: 50:91190
ORIGINAL REFERENCE NO.: 50:17149a-c
TITLE: Biological protection against radiation. XIV. Further researches on the specificity of radiation protection action of cysteine-cysteamine and various sulfhydryl compounds
AUTHOR(S): Langendorff, Hanns; Koch, Ruprecht
SOURCE: Strahlentherapie (**1956**), 99, 567-76
CODEN: STRAAA; ISSN: 0039-2073
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 50, 9456i. Expts. are described on the protection against x-rays carried out in rats and mice. Examined were N-**alkyl**-substituted

cysteamines and cystamines, N-phenyl-substituted cysteamines, acid amides of cysteamine, isocysteine, β-homocysteine, α-methylcysteine, N-diethylhomocysteamine, as well as mercapto(amino)heptane and mercapto(amino)pentane. The results of these expts. confirm that the protective effect of the sulfhydryl bodies is bound to the base constitution HS(CH2)xNRR', in which x must probably not be higher than 3 and R and R' have to be **alkyl**-substituting compds. The α-thio amino acids, which correspond to the base constitution, are efficacious, as well, whereas the β-isomeric compds. evidently produce an effect of sensitization.

IT **22681-73-8**, Cysteine, 2-methyl-
(radioprotective activity of)

RN 22681-73-8 CAPLUS

CN Cysteine, 2-methyl- (8CI, 9CI) (CA INDEX NAME)



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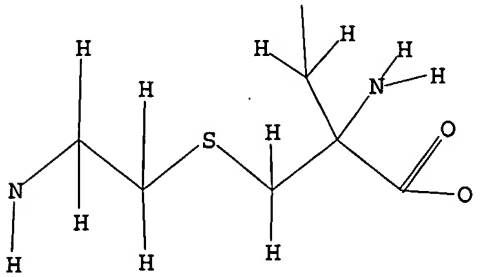

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SAMPLE SCREEN SEARCH COMPLETED - 85 TO ITERATE

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SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1147 TO 2253
PROJECTED ANSWERS: 9 TO 360

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L11 10 L10

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Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

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L14  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2001:730698  CAPLUS
DOCUMENT NUMBER:          135:289056
TITLE:                    Preparation of amidino compounds useful as nitric
                          oxide synthase inhibitors
INVENTOR(S):              Webber, Ronald Keith; Awasthi, Alok K.; Bergmanis,
                          Arija A.; Durley, Richard C.; Ganser, Scott S.; Hagen,
                          Timothy J.; Hallinan, Ann E.; Hansen, Donald W.;
                          Hickory, Brian S.; Moormann, Alan E.; Pitzele, Barnett
                          S.; Promo, Michelle A.; Schartman, Richard R.; Snyder,
                          Jeffrey S.; Trivedi, Mahima; Tsymbalov, Sofya
PATENT ASSIGNEE(S):       Pharmacia Corporation, USA
SOURCE:                   PCT Int. Appl., 144 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

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     WO 2001072703         A1    20011004    WO 2001-US9433           20010323 <--
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             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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     US 2002111493         A1    20020815    US 2001-816575           20010323
     US 6586474            B2    20030701
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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     JP 2003528853         T2    20030930    JP 2001-570616           20010323
     NZ 520812             A     20040430    NZ 2001-520812           20010323
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     US 2003199701         A1    20031023    US 2002-321969           20021217
     US 2004186178         A1    20040923    US 2004-815375           20040401
PRIORITY APPLN. INFO.:                       US 2000-191923P      P   20000324
                                             US 2001-816575       A3  20010323
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OTHER SOURCE(S): MARPAT 135:289056

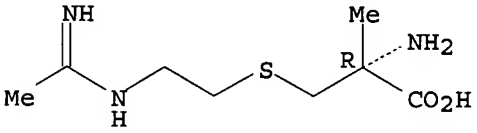
AB The invention relates to S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-L-cysteine (1) or its pharmaceutically acceptable salts for use as nitric oxide synthase (NOS) inhibitors. Thus, 1.2HCl was prepared by a multistep procedure involving S-alkylation of (2R)-2-methyl-L-cysteine hydrochloride with Boc-NHCH2CH2Br (Boc = tert-butoxycarbonyl), deprotection, condensation with Et acetimidate hydrochloride, and acidolysis with 1 N HCl. (2R)-2-methyl-L-cysteine hydrochloride was obtained from (R)-cysteine Me ester hydrochloride. Inhibitory assays for compound 1.2HCl showed hiNOS, hecNOS, hncNOS, and human cartilage IC50 values 3.1, 77, 15 μM, and 0.7 μM, resp.

IT **364067-16-3P 364067-34-5P 364067-35-6P 364067-36-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of amidino compds. useful as nitric oxide synthase inhibitors)

RN 364067-16-3 CAPLUS

CN L-Cysteine, S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 HCl

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:730697 CAPLUS
DOCUMENT NUMBER: 135:273215
TITLE: Preparation of amidino compounds useful as nitric oxide synthase inhibitors
INVENTOR(S): Webber, Ronald Keith; Awasthi, Alok K.; Bergmanis, Arija A.; Durley, Richard C.; Fok, Kam F.; Ganser, Scott S.; Hagen, Timothy J.; Hallinan, Ann E.; Hansen, Donald W.; Hickory, Brian S.; Manning, Pamela T.; Mao, Michael; Moormann, Alan E.; Pitzele, Barnett S.; Promo, Michelle A.; Schartman, Richard R.; Scholten, Jeffrey A.; Snyder, Jeffrey S.; Toth, Mihaly V.; Trivedi, Mahima; Tsymbalov, Sofya; Tjoeng, Foe Siong
PATENT ASSIGNEE(S): Pharmacia Corporation, USA
SOURCE: PCT Int. Appl., 159 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072702	A2	20011004	WO 2001-US9431	20010323 <--
WO 2001072702	A3	20020919		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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CA 2402199	AA	20011004	CA 2001-2402199	20010323 <--
US 2002019563	A1	20020214	US 2001-816577	20010323
US 6403830	B2	20020611		
US 2002111493	A1	20020815	US 2001-816575	20010323
US 6586474	B2	20030701		
EP 1265859	A2	20021218	EP 2001-920718	20010323
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
ZA 2002006459	A	20030813	ZA 2002-6459	20010323
JP 2003528852	T2	20030930	JP 2001-570615	20010323
NZ 520813	A	20040528	NZ 2001-520813	20010323
ZA 2002006455	A	20030813	ZA 2002-6455	20020813
US 2003199701	A1	20031023	US 2002-321969	20021217
US 2004186178	A1	20040923	US 2004-815375	20040401

PRIORITY APPLN. INFO.:		
US 2000-191923P	P	20000324
US 2001-816575	A3	20010323
WO 2001-US9431	W	20010323
US 2002-321969	B3	20021217

OTHER SOURCE(S): MARPAT 135:273215

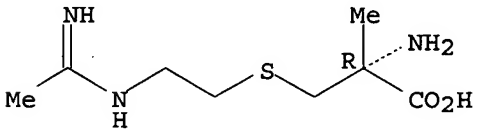
AB Amidino compds. R11N:CR13NR12CR9R10CR1R7-X-CR5R6CR2(NR3R4)COR8 [X = S, SO, SO2; R1, R5, R6, R7 = H, halo, alkyl (alkyl and other groups may be substituted), alkenyl, alkynyl, alkoxyalkyl; R2 = alkyl, alkenyl, alkynyl, alkoxyalkyl, alkylthioalkyl; R3 = H, OH, CHO, alkanoyl, CO2H, C(O)SH or alkyl esters; R8 = OH, alkoxy, an amino or alkylamino group or R3 and R8 may form a ring; R4 = H, CO2H, carbalkoxy; R9, R10 = H, alkyl, alkenyl, alkynyl, alkoxyalkyl; R11, R12 = H, OH, CO2H, C(O)SH or esters or R11 and R12 may form a ring; R13 = alkyl (with provisos)] or their salts were prepared as nitric oxide synthase (NOS) inhibitors. Thus, S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-L-cysteine dihydrochloride (1)

was prepared by a multistep procedure involving S-alkylation of (2R)-2-methyl-L-cysteine hydrochloride with Boc-NHCH2CH2Br (Boc = tert-butoxycarbonyl), deprotection, condensation with Et acetimidate hydrochloride, and acidolysis with 1 N HCl. (2R)-2-methyl-L-cysteine hydrochloride was obtained from (R)-cysteine Me ester hydrochloride. Inhibitory assays for compound 1 showed hiNOS, hecNOS, hncNOS, and human cartilage IC50 values 3.1, 77, 15 μM, and 0.7 μM, resp.

IT **364067-16-3P 364067-34-5P 364067-35-6P 364067-36-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of amidino compds. useful as nitric oxide synthase inhibitors)

RN 364067-16-3 CAPLUS
CN L-Cysteine, S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

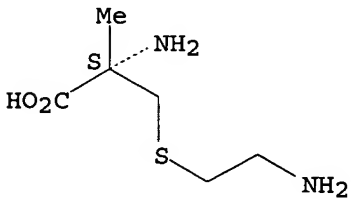
Absolute stereochemistry.



●2 HCl

RN 364067-34-5 CAPLUS
CN D-Cysteine, S-(2-aminoethyl)-2-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

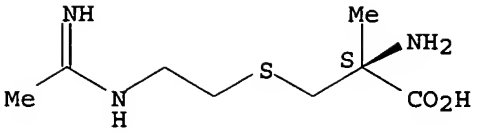
Absolute stereochemistry.



●2 HCl

RN 364067-35-6 CAPLUS
CN D-Cysteine, S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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RN 364067-36-7 CAPLUS
CN L-Cysteine, S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-, monoacetate (9CI) (CA INDEX NAME)

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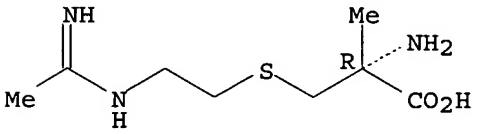
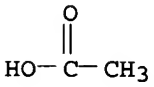
CRN 364067-22-1
CMF C8 H17 N3 O2 S

Absolute stereochemistry.



CM 2

CRN 64-19-7
CMF C2 H4 O2



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364068-78-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amidino compds. useful as nitric oxide synthase inhibitors)

RN 364067-22-1 CAPLUS
CN L-Cysteine, S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl- (9CI) (CA INDEX NAME)